

Effect of setting up rapid response nursing team on cardiopulmonary arrest and unexpected death in patients admitted to emergency department

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*Abstract

Background: Rapid response nursing team assesses patients at an earlier stage of clinical deterioration and reduces mortality rate.

Objective: The aim of this study was to determine the effect of setting up rapid response nursing team on cardiopulmonary arrest and unexpected death in patients admitted to emergency department.

Methods: This randomized clinical trial was performed on 714 patients in the emergency department of selected hospital affiliated to Alborz University of Medical Sciences during 2013. Patients were randomly allocated to two groups. Rapid response nursing team consisted of a critical care nurse and an anesthesia technician that attended in the emergency department during work shifts 24 hours a day. The control group was cared by the department staff as routine. The intervention group was cared by the rapid response nursing team when the patient condition was deteriorating and after a careful evaluation. Results of the interventions were recorded for both groups. Data were analyzed using T- test, Chi-square test, and Fisher's exact test.

Findings: There was no significant difference between the two groups in terms of age and gender. There were significant associations between setting up rapid response nursing team and transfer rate to the intensive care units and mortality rate outside of the intensive care units.

Conclusion: With regards to the results, setting up rapid response nursing team was effective in reducing transfer rate to the intensive care unit, mortality rate and cardiopulmonary arrest.

Keywords: Nursing Team, Sudden Death, Heart Arrest, Hospital Emergency Service

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